

WHAT IS CLAIMED IS:

1 *Sub* 1. A method of dividing an elongated web having
2 a variable width into a plurality of elongated strips, com-
3 prising the steps of:

4 advancing the web lengthwise in a predetermined di-
5 rection along a predetermined path;

6 subdividing the web into a plurality of strips, in-
7 cluding cutting the advancing web in at least one severing
8 plane;

9 monitoring the widths of the strips and generating
10 signals denoting the monitored widths;

11 processing said signals; and

12 shifting at least one of the web, the severing plane
13 and at least one of the strips sideways when the processing
14 step indicates departure of at least one monitored width
15 from a predetermined width.

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1 2. The method of claim 1, wherein said subdividing
2 step includes splitting the web into two strips.

1 3. The method of claim 2, wherein said processing
2 step includes comparing the signals denoting the widths
3 of said two strips.

1 4. The method of claim 3, wherein said predeter-
2 mined width is half the width of the web.

1 5. The method of claim 4, wherein said shifting
2 step includes moving the web sideways in a direction to
3 reduce the width of the strip having a width exceeding half
4 the width of the web.

1 6. The method of claim 3, wherein said shifting
2 step includes turning the advancing web about an axis which
3 is located in said at least one severing plane.

1 7. The method of claim 1, further comprising the
2 step of advancing the strips along second paths.

1 8. The method of claim 7, wherein said step of advancing
2 the strips includes establishing a variable spacing bet-
3 ween said second paths.

1 9. The method of claim 8, wherein said monitoring
2 step is carried out in said second paths.

1 10. The method of claim 8, wherein the
2 establishment of said variable spacing includes changing
3 the mutual inclinations of two neighboring successive in-
4 crements of each of said second paths.

1 11. The method of claim 10, wherein said second
2 paths slope downwardly from said at least one severing
3 plane as seen transversely of said predetermined direction.

1 *Sub 12* 12. The method of claim 1, wherein said subdividing
 2 step includes splitting the web into two strips and said
 3 shifting step includes shifting at least one of the two
 4 strips sideways.

1 13. The method of claim 12, further comprising the
 2 step of monitoring the width of the web, said subdividing
 3 step further including shifting at least one of the strips
 4 sideways until the width of the at least one strip assumes
 5 a predetermined value.

1 14. The method of claim 12, wherein said step of
 2 shifting at least one of the strips includes shifting only
 3 one of said strips sideways relative to the other of said
 4 strips.

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1 5. Apparatus for dividing an elongated web having
2 a variable width into two strips, comprising:

3 means for advancing the web lengthwise in a
4 predetermined direction along a predetermined path;

5 means for subdividing the web into two strips
6 including a severing unit arranged to split the web in a
7 severing plane;

8 means for monitoring the widths of the strips and
9 for generating first signals denoting the monitored widths;

10 means for processing said first signals and for
11 generating second signals when the width of at least one
12 of the strips deviates from a predetermined width; and

13 adjusting means including means for shifting at
14 least one of the web, the strips and the subdividing means
15 transversely of said direction in response to said second
16 signals.

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16. The apparatus of claim 15, wherein said adjusting means includes only means for shifting the web transversely of said direction.

17. The apparatus of claim 15, wherein said shifting means includes first and second rollers flanking the web upstream of said severing unit and rotatable about at least substantially parallel axes, and means for jointly turning said rollers about an axis at least substantially normal to said at least substantially parallel axes.

18. The apparatus of claim 15, wherein said advancing means includes a pair of rolls each engaging a different one of the strips, said rolls being rotatable about axes which are inclined relative to each other.

19. The apparatus of claim 18, wherein said rolls are adjacent one side of said path and said advancing means further includes a second pair of rolls each engaging a different one of the strips, the rolls of said second pair being adjacent the other side of said path and having axes which are inclined relative to each other.

20. The apparatus of claim 19, wherein said monitoring means is disposed downstream of at least one of said pairs of rolls as seen in said predetermined direction.

21. The apparatus of claim 19, further comprising means for changing the level of at least one of said pairs of rolls.

22. The apparatus of claim 21, wherein said at least one pair of rolls is disposed beneath the respective portion of said path.

23. The apparatus of claim 22, further comprising a deflecting roller contacting the strips downstream of said at least one pair of rolls, said level changing means including an elevator common to said at least one pair of rolls and said deflecting roller.

24. The apparatus of claim 23, wherein said at least one pair of rolls and said deflecting roller are disposed at opposite sides of said path.

1 25. The apparatus of claim 23, further comprising
2 a housing having a guide for said elevator.

1 26. The apparatus of claim 25, wherein said
2 elevator comprises a platform supporting said deflecting
3 roller and said at least one pair of rolls and being
4 movable along said guide.

1 27. The apparatus of claim 26, wherein said level
2 changing means further comprises a feed screw operable to
3 move said platform along said guide and fastener means
4 releasably securing said platform to said housing.

1 28. The apparatus of claim 25, wherein said guide
2 is a dovetailed guide.

1 ~~Sub #1~~ 29. The apparatus of claim 18, wherein said rolls
2 are disposed at a level below the adjacent portion of said
3 path, said shifting means including means for changing the
4 level of at least one of the strips by way of said rolls
5 in response to said second signals.

1 30. The apparatus of claim 29, wherein said
2 processing means includes means for generating second signals
3 denoting the combined width of the strips and said means
4 for changing the level of the at least one strip is
5 responsive to said second signals.

1 31. The apparatus of claim 30, wherein said
2 processing means further comprises means for generating
3 additional signals denoting the widths of the strips and
4 said strip shifting means further includes means for
5 changing the level of the other of the strips in response
6 to said additional signals.

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